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TITLE:

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DRY ETCHING METHOD

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COUNTRY N/A

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ABSTRACT:

PURPOSE: To provide an anisotropic dry etching method of platinum layer used for an electrode etc., of a semiconductor device using a ferroelectric thin film.

CONSTITUTION: **Pt**-base metal layer 3 is subjected to dry **etching** while heating and controlling a substrate temperature to 90°C or can **release** liberated sulfur into plasma such as S<SB>2</SB>F<SB>2</SB>. Since the deposit of sulfur or sulfur compound such as polythiazyl is utilized as a side-wall protection film 6. anisotropy is improved. Since a substrate is heated within a specific temperature range, a practical etching rate can

DOCUMENT-IDENTIFIER: US 20030129866 A1 TITLE: Spring metal structure with passive-conductive coating on tip ----- KWIC ------Summary of Invention Paragraph - BSTX (10): [0007] In accordance with a second embodiment of the present invention, methods for fabricating microspring structures are disclosed in which a conductive coating (e.g., a refractory noble metal such as Rhodium (Rh), Iridium (Ir), Rhenium (Re), Platinum (Pt), and Palladium (Pd)) is deposited on the tip of the free (i.e., cantilevered) portion of the spring metal finger using an intermediate mask that is patterned between the formation (**etching**) of the spring finger and the release of the spring finger. A first mask is formed over sequentially formed release and spring metal layers that is used to etch the underlying spring metal and release layers to form a spring metal island formed on a release material island. The second mask is then formed with a window that exposes a tip of the spring metal island. In one embodiment, the second mask is photoresist formed with undercut (i.e., negative sloped) walls to facilitate liftoff of the passive-conductive coating formed on the upper surface of the second mask. To prevent the formation of a flange that may undesirably secure (anchor) the tip to the underlying substrate, the spring structure is briefly immersed in a release material etchant to remove the release material located under the tip prior to the deposition of the passive-conductive coating. The passive-conductive coating

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